

ZEMZINA, I.N.; TSUKERVANIK, I.P.

Acylation of aromatic compounds. Report No.8. Uzb.khim.zhur.  
8 no.1:51-55 '64. (MIRA 17:4)

1. Tashkentskiy gosudarstvennyy universitet imeni V.I.Lenina.

ZEMZINA, I.N.; TSUKERVANIK, I.P.

Acylation of aromatic compounds. Part 7: Benzoylation, caproylation,  
and acetylation of 2-methoxynaphthalene. Zhur. ob. khim. 33  
no.8:2605-2609 Ag '63. (MIRA 16:11)

1. Tashkentskiy gosudarstvennyy universitet.

GORDADZE, G.N.; ZENAISHVILI, O.P.

Activity of the Scientific Society of Medical Parasitologists  
of Tiflis in 1962. Med. paraz. i paraz. bol. 32 no.3:378-379  
(MIRA 17:3)  
My- Je'63

MARUASHVILI, G.M.; GORDADZE, G.N.; GVINIASHVILI, Sh.P.; POLOVETSKAYA, A.A.;  
ZENAISHVILI, O.P.; GABUNIYA, L.V.

Experience with eradicating ascariasis in Telavi District  
[with summary in English]. Med.paraz. i paraz.bol. 27 no.5:  
555-561 S-0 '58. (MIRA 12:1)

1. Iz Instituta malyerii i meditsinskoy parazitologii imeni S.S.  
Virsaladze Ministerstva zdravookhraneniya Gruzinskoy SSR (dir.  
instituta - prof. G.M. Maruashvili) i iz Telavskoy rayonny sani-  
tarno-epidemiologicheskoy stantsii (glavnnyy vrach L.A. Sakvarelidze).  
(ASCARIASIS, prev. & control,  
(Rus))

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964420016-8

GORDADZE, G.N. i ZENAIKHEVILI, O.P.

Activity of the Scientific Society of Medical Parasitologists  
of Tiflis in 1961. Med. paraz. i paraz. bol. 31 no.6:755 N-D  
'62. (MIRA 17:11)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964420016-8"

ZEMANEK, A.

GEOGRAPHY & GEOLOGY

Periodicals: CASOPIS PRO MINERALOGII A GEOLOGII Vol. 3, no. 2, 1958

SATTRAN, V.; Skver, V.; Zemanek, A. Crystalline rocks in the Erzgebirge. p. 152

Monthly List of East European Accessions (EEAI) LC, VOL.8, no. 5, May 1959, Unclass.

COUNTRY	: CZECHOSLOVAKIA
CATEGORY	: Chemical Technology. Chemical Products and Their Applications. Instruments and Automation
ABS. JOUR.	: RZKhim., No. 23 1959, No. 82561
AUTHOR	: Zenaty, G.; Lezatka, J.
INST.	: -
TITLE	: Automatic Control and Measurement of Feed Charged into a Rotary Kiln
ORIG. PUB.	: Stavivo, 1959, 37, No 1, 14-15
ABSTRACT	: For the purpose of maintaining a constant level of solids charge ahead of the bucket elevator, an electrode system, involving a two position control, is being employed. This control operates a motor that activates a device that pinches rubber tube through which the solids are being fed. -- Ye. Stefanovskiy
CARD:	1/1

H - 8

ZENATY, Miroslav; DLUHOS, Max; HORN, Vitezslav

Arrest of hemorrhage in the liver and kidney. Rozhl. chir. 40 no.10:  
669-675 O '61.

1. Vyzkumny ustav traumatologicky v Brne, reeditel prof. MUDr. Vladimir  
Novak, Dr.Sc. II patologicko-anatomicky ustav university J. Ev. Purkyne  
v Brne, prednosta prof. MUDr. Max Dluhos; Ortopedicka klinika university  
J. Ev. Purkyne v Brne, prednosta prof. MUDr. Bedrich Frejka, Dr.Sc.

(HEMOSTASIS) (LIVER DISEASES ther)  
(KIDNEY DISEASES ther)

ZENATY, M.

Function of the injured kidney. Rozhl. chir. 43 no.3:189-193  
Mr'64.

1. Vyzkumy ustav traumatologicky v Brne; reditel: prof.dr.  
Vl. Novak, DrSc.

ZENATY, M.

Nonsurgical treatment of acetabular fractures and their late results. Rozhl. chir. 43 no.7:495-499 Jl '64.

1. Vyzkumny ustav traumatologicky v Brne (reditel prof. dr. V. Novak, DrSc.).

KOCOUREK, M.; ZENATY, M.

Surgical approach to the kidneys in rabbits. Cesk.fysiol.9 no.6:  
557-558 N '60.

1. Vyzkumny ustav traumatologicky, Brno.  
(KIDNEYS surg)

ZENATY, Miroslav

Nephrography. Rozhl.chir.39 no.7:495-500 J1'60.

1. Vyzkumny ustav traumatologicky v Brne, reditel prof. MUDr.  
Vladimir Novak.  
(KIDNEY radiography)

ZENATY, Miroslav

Management of bladder paralysis after injury of the spinal cord.  
Rozhl. chir. 38 no.10:693-699 O '59.

1. Vyzkumný ustav traumatologicky v Brne, ředitel prof. dr.  
Vladimir Novák.  
(SPINAL CORD wds. & inj.)  
(BLADDER dis.)  
(PARALYSIS etiol.)

ZENATY, Miroslav

Management of bladder paralysis after injury of the spinal cord.  
Rozhl. chir. 38 no. 10:693-699 O '59

1. Vyzkumny ustav traumatologicky v Brne, reditel prof. dr Vladimir  
Novak.

(SPINAL CORD, wds. & inj.) (BLADDER, dis.)  
(PARALYSIS, etiol.)

ZENATY, Miroslav (Brno, Kotlarska 14.)

Renal participation in the post-traumatic reaction. Rozhl. chir. 37  
no. 1:56-59 Jan 58.

I. Vyzkumny ustav traumatologicky v Brne, reditel prof. MUDr. Vladimir  
Novak.

(KIDNEY DISEASES, ther.  
post-traum. renal failure, management (Cz))  
(WOUNDS AND INJURIES, compl.  
same)

ZENATY, Miroslav, Dr.

Late complications of hidden injuries to the kidneys. Rochl. chir.  
36 no.5:318-323 May 57.

1. Vyzkumny ustav traumatologicky v Brne, reditel prof. Dr. Vladimir  
Novak.

(KIDNEYS, wds. & inj.  
hidden, late compl. (Cz))

ZENATY, P.

Tunneling for the Kruzberk waterworks. p. 529.

VODNÍ HOSPODARSTVÍ. (Ministerstvo energetiky a vodního hospodarství a  
Vedecká technická společnost pro vodní hospodarství) Praha, Czechoslovakia,  
No. 12, Dec. 1959.

Monthly List of East European Accession (EEAI) , LC Vol. 9, no. 2,  
Feb. 1960

Unel.

ZENATY, P.

Construction of conduits for Kruzberk Water Supply. (To be contd.) p. 405.

VODNI HOSPODARSTVI. (Ministerstvo energetiky a vodniho hospodarstva a  
Vedecka technicka spolecnost pro vodni hospodarstvi) Praha, Czechoslovakia.  
No. 10, Oct. 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 11,  
November 1959.

Uncl.

GORDADZE, G.N.; ZENAYSHVILI, O.P.

Study of the action of antibiotics on larvae of Ancylostoma  
within the host's body. Med.paraz.i paraz.bol. 29 no.4:418-  
421 Jl-Ag '60. (MIRA 13:11)

1. Iz Gel'mintologicheskogo otdeleniya (rukoveditel' - prof.  
G.N. Gordadze) Nauchno-issledovatel'skogo instituta malyarii i  
meditsinskoy parazitologii imeni S.S. Viraladze (dir. - prof.  
G.M. Maryashvili) Ministerstva zdravookhraneniya Gruzinskoy  
SSR.

(HOOKWORM DISEASE) (ANTIBIOTICS)

ZENAYSHVILI, O.P.; BAKANIDZE, T.A.; GÖBECHIYA, B.K.; KAVTARADZE, M.A.

Results of alkopar trials in foci of necatoriasis. Med.paraz.  
i paraz.bol. 33 no.3:302-303 My-Je '64.

(MIRA 18:2)

1. Institut meditsinskoy parazitologii i tropicheskoy meditsiny  
imeni Virsaladze Ministerstva zdravookhraneniya Gruzinskoy SSR,  
Tbilisi.

MARUASHVILI, G.M.; ZENAYSHVILLI, O.P.

Activity of the Tiflis Society of Medical Parasitologists in 1958.  
Med.paraz. i paraz.bol. 28 no.4:507-508 '59. (MIRA 12:12)  
(TIFLIS--PARASITOLOGICAL SOCIETIES)

ZENAYSHVILI, O. P.

ZENAYSHVILI, O. P. --"On the Question of Curing Ancylostomidoses and Certain Other Helmitoses with Carbon Tetrachloride."\*(Dissertation for Degrees in Science and Engineering Deferred at USSR Higher Educational Institutions.)  
Tbilisi. State Medical Inst. Tbilisi, 1955

SO: Knizhnaya Letopis', No. 25, 18 Jun 55

\* For Degree of Doctor of Medical Sciences

ZENAYSHVILLI, O.P.

Some contraindications for carbon tetrachloride therapy in ancylostomiasis. Med.paraz. i paraz.bol.25 no.4:297-301 O-D '56.

(MIRA 10:1)

1. Iz gel'mintologicheskogo otdeleniya Instituta malyarii i meditsinskoy parazitologii imeni S.S.Virsaladze Ministerstva zdravookhraneniya Gurzinskoy SSR (dir. instituta - prof. G.M.Marushvili, zav. otdeleniyem - kandidat meditsinskikh nauk G.N.Gordadze)

(HOOKWORM INFECTION, therapy,  
carbon tetrachloride in ankylostomiasis, fatal compl.

(Rus))

(CARBON TETRACHLORIDE, injurious effects,  
fatal compl. in ther. of ankylostomiasis (Rus))

ZENAYSHVILI, O.P.

Activities of the Scientific Society of Medical Parasitologists  
of Tiflis in 1963. Med. paraz. i paraz. bol. 33 no.6:753-754  
(MIRA 18:6)  
N-D '64.

ZENAYSHVILI, O.P.; BAKANIDZE, T.A.

Testing dichlorazine in ankylostomiasis, ascariasis and  
trichocephaliásis. Med. paraz.i paraz.bol. 34 no.4:481-  
482 Jl-ag '65. (MIRA 18:12)

1. Klinicheskoye otdeleniye Instituta med. parazitologii i  
tropicheskoy meditsiny imeni S.S.Virsaladze Ministerstva  
zdravookhraneniya Gruzinskoy SSR, Tbilisi. Submitted March  
23, 1965.

KURASHVILI, B.Ye., otv. red.; BARATASHVILI, T.A., red.;  
GODERDZISHVILLI, G.I., red.; GORDADZE, G.N., red.;  
ELIAVA, I.Ya., red.; ZENAYSHVILLI, P., red.; KAMALOV,  
N.G., red.; CHUBABRIYA, I.T., red.; AVALIANI, N.M., red.;  
izd-va; BOKERIYA, E.N., tekhn. red.

[Materials of the Scientific Session of Helminthologists of  
the Transcaucasian Republics on Problems of Helminthofauna  
and Control of Helminthiasis in Man, Farm Animals and  
Plants] Materialy Nauchnoi sessii gel'mintologov respublik  
Zakavkaz'ia po voprosam gel'mintofauny i bor'by s gel'minto-  
zami cheloveka, sel'skokhoziaistvennykh zhivotnykh i raste-  
nii, Tiflis, 1961. Izd-vo AN Gruz.SSR, 1963. 220 p.  
(MIRA 16:11)

1. Nauchnaya sessiya gel'mintologov respublik Zakavkaz'ya  
po voprosam gel'mintofauny i bor'by s gel'mintozami chelo-  
veka, sel'skokhozyaystvennykh zhivotnykh i rasteniy, Tiflis,  
1961.

(Transcaucasia—Helminthology)

ZENBRZUSKI, Konrad

Forty two cases of tularemia. Polskie arch.med.wewn. 25 no.2:  
377-386 '55.

1. Z Wojewódzkiej Stacji Sanitarno-Epidemiologicznej w Olsztynie  
Warszawa, ul. Zytnia 48 m. 24.  
(TULAREMIA, epidemiology,  
in Poland, epidemic outbreak)

DENGEL, V., inz.; ZENC, M., inz.

Results of the ground motion and deformation measurement in upcast  
shaft undermining. Uhli 6 no.9:295-300 S '64.

1. Scientific Research Institute of Coal, Ostrava-Radvanice.

ZENC, Milos, inz.; DENGEL, Vilibald, inz.

Depth measurement by the NASM-4B geodimeter. Rudy 13 no.3:84-  
88 Mr '65.

1. Scientific Research Institute of Coal, Ostrava-Radvanice.

DENGEL, V., inz.; ZENC, M., inz.

Some results of the research on extracting coal in the shaft pillar in the Jan Maria Coal Mine. Uhli 4 no.7:227-231 Jl '62.

1. Vedeckovyzkumny uhelny ustav, Ostrava-Radvanice.

BOGUSHEVSKIY, A.A., kand.tekhn.nauk, GALYAMIN, Ye.P., inzh.,  
ZENCHENKO, A.A., inzh., MAKAROV, V.I., inzh.

Land reclamation for agricultural use in the Yakut A.S.S.R. Gidr.  
1 mol. 12 no.8:3-9 Ag '60. (MIRA 13:8)  
(Yakutia--Irrigation) (Yakutia--Drainage)

ZENCHENKO, Aleksey Fedorovich [Zenchanka, A.]; UKSUSOV, D. [Uksusau, D.].  
red.; SLAVYANIN, I., tekhn.red.

[Let's show you Shov', a new collective farm village] Vos' iano,  
novae kalhasnae sialo Shou. Minsk, Dziarzh.vyd-va BSSR, 1959.  
31 p. (MIRA 13:4)

(Collective farms)

ZENCHENKO, A. I.

Protection of measuring instruments in shipping by railroad.  
Priborotroenie no. 9:28 S '60. (MIRA 13:9)  
(Measuring instruments) (Packing for shipment)

KUZ'MINSKIY, A. S., GOL'DFARB, Ya.L., FEDOROV, B.P., ZHENCHENKO, A. I.,  
KOGARMAN, A.P., GORUSHKINA, G.I., ANGERT, L.O.

Synthesis of some thiophene derivatives and study of their  
behavior as ingredients of rubber accelerators and antioxidants).  
Zhur.prikl.khim. 33 no.5:1182-1187 My '60. (MIRA 13:7)  
(Thiophene) (Vulcanization)

ANGERT, L.G., kand.khimicheskikh nauk; ZENCHENKO, A.I.; KUZ'MINSKY,  
A.S., doktor khimicheskikh nauk

Volatilization of ingredients from crude and vulcanized  
rubbers. Trudy NIIRP no. 6:92-101 '60. (MIRA 13:12)  
(Rubber)

68699

S/069/60/022/01/001/025

D034/D003

56 15.9130

AUTHOR: Angert, L.G., Zenchenko, A.I., Kuz'minskiy, A.S.

TITLE: Volatilization of Ingredients from Polymers

PERIODICAL: Kolloidnyy zhurnal, 1960, Vol XXII, Nr 1, pp 2-8 (USSR)

ABSTRACT: The present study was carried out to establish the empiric rules characterizing the behaviour of ingredients in caoutchouc and rubber under various conditions, and also to consider the problem from the theoretical standpoint. Object of the study was the volatilization of an antioxidant, phenyl- $\beta$ -naphthylamine, from a rubber plate, while heating the latter in a gas current. The investigation method was as follows: Sodium butadiene rubber (SKB, without antioxidant) was mixed on micro-rollers with phenyl- $\beta$ -naphthylamine. From the mixture obtained, plates of a given thickness were pressed. The volatilization of the antioxidant from a caoutchouc plate with

Card 1/4

68699

S/069/60/022/01/001/025  
D034/D003

Volatilization of Ingredients from Polymers

standard surface (150 x 10 mm) was carried out in a glass tube 18 mm in diameter, the caoutchouc sample being placed on a glass support. The tube was laid into a horizontal tube furnace heated with a silicone liquid which was forced in from a Vobser (sic) thermostat (see diagram). The nitrogen current passing through the tube carried the vapors of the antioxidant from the heated tube section into an attached trap immersed into a cooling mixture. The antioxidant condensing in the trap was quantitatively determined with the colorimetric method. The volatilization process was studied at temperatures above 100 C. The rate of volatilization of the antioxidant was determined with respect to the velocity of the nitrogen current passing over the plate, to the plate thickness and to the initial concentration of the ingredient. The activation energy of the volatilization process is ✓

Card 2/4

68699

S/069/60/022/01/001/025  
D034/D003

## Volatilization of Ingredients from Polymers

equal to 14,0 kcal/mole. It could be observed that the rate of volatilization of phenyl- $\beta$ -naphthylamine decreases in accordance with the following order of polymers: polyethylene > fluororubber > SKB > SKS-30 > SKN-26 > nairite. The rate of volatilization sharply falls with increasing density of the three-dimensional network of the vulcanizate and also declines in the presence of a filler. The proposed mechanism of this volatilization process was confirmed by corresponding theoretical calculations, as a result of which the equation

$$\frac{c}{c_0} = 1 - e^{-\frac{m}{R}t} \quad (13)$$

(c - amount of ingredient volatilizing during the period t;  $c_0$  - initial amount of ingredient in the rubber (percent by weight); m - constant; R - thickness of rubber plate (in cm)) could be found. The vulcanisates used to

Card 3/4

4

68699

S/069/60/022/01/001/025  
D034/D003

Volatilization of Ingredients from Polymers

show the rate of volatilization in dependence on the three-dimensional network of rubber specimens were prepared by treating 1 mm thick caoutchouc plates with X-ray tubes for radiochemical investigations of the type TRTs-ZA (developed by the Institut fizicheskoy khimii AN SSSR - Institute of Physical Chemistry AS USSR), under nominal working conditions of the tubes of 80 kw and 200 ma. There are 1 diagram, 8 graphs and 18 references, 10 of which are Soviet, 7 English, and 1 German.

ASSOCIATION: Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti, Moskva (Scientific Research Institute of the Rubber Industry, Moscow)

SUBMITTED: December 7, 1958.

Card 4/4

ANGERT, L.G.; ZENCHENKO, A.I.; KUZ'MINSKIY, A.S.

Structure of butadiene-methylvinylpyridine crude rubber  
and of vulcanized rubbers based on it. Kauch.i rez. 21  
no.9:5-8 S '62. (MIRA 15:11)

1. Nauchno-issledovatel'skiy institut rezinovoy  
promyshlennosti.

(Rubber, Synthetic)  
(Butadiene) (Pyridine)

S/080/60/033/005/008/008

AUTHORS: Kuz'minskiy, A.S., Gol'dfarb, Ya.L., Fedorov, B.P., Zenchenko,  
A.I., Kogerman, A.P., Gorushkina, G.I., Angert, L.G.

TITLE: The Synthesis of Some Thiophene Derivatives and the Study of  
Their Behavior as Rubber Ingredients (Accelerants and Anti-  
oxidants). Communication 2.

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, No 5, pp 1182 - 1187

TEXT: Some azomethines of the thiophene series are accelerants of the vulcanization process [Ref 1], some of them being also antiseptics [Ref 2] which is important for the cable industry. The most suitable azomethines are those containing hydroxyl groups. Other substances of this type were synthesized, therefore, which differed only in the position of the hydroxyl groups. The following substances were synthesized: bis-[2-thenylidene]-hydrazine, bis-[5-methyl-2-thenylidene]-hydrazine, bis-[2-thenylidene]-μ-phenylenediamine, 5'-methyl-2'-thenylidene-6-amino-2-mercaptopbenzothiazole, 5-methyl-2-thenylidene-o-aminophenol and 2'-oxybenzylidene-2-thenylamine, as well as two new sulfides: [ $\beta$ -oxyethyl]-2-thenylsulfide and 2-thenyl-[n-oxyphenyl]-sulfide. The two sulfides mentioned and 2'-thenylidene-6-

Card 1/2

3

S/080/60/033/005/008/008

The Synthesis of Some Thiophene Derivatives and the Study of Their Behavior as Rubber Ingredients (Accelerants and Antioxidants). Communication 2.

amino-2-mercaptobenzothiazole and 6-amino-2-mercaptobenzothiazole are accelerants, but their efficiency is less than that of mercaptobenzothiazole. It was evident that the hydroxyl group positively affects the accelerating action of the compounds, if it is located in the para-state of the benzene ring. The introduction of molecules of mercaptobenzothiazole of the amino-group into the benzene ring decreases the efficiency of the compound. A further complication of the molecule decreases the efficiency still more. The cause of these phenomena is not known at the present time. The principal role in the accelerating action of the compounds considered is played by the hydroxyl group.

There are 4 tables and 5 references: 2 Soviet, 2 English and 1 German.

SUBMITTED: August 20, 1959

Card 2/2

15.9300

26880  
S/081/61/000/013/020/028  
B117/B203**AUTHORS:** Angert, L. G., Zenchenko, A. I., Kuz'minskiy, A. S.**TITLE:** Volatilization of ingredients from rubbers**PERIODICAL:** Referativnyy zhurnal. Khimiya, no. 13, 1961, 652, abstract 13M328 (Tr. N.-i. in-ta resin. prom-sti, sb. 6, 1960, 92-101)

**TEXT:** The authors studied the kinetics of volatilization of Neozone D in  $N_2$  flow from CK5(SKB) plates with a standard surface and given thickness (h). The kinetic curves were described with an equation of the type  $C/C_0 = [1 - \exp(-kt)]$  (I), where C is the amount of ingredient volatilized at the instant t, in % by weight of rubber;  $C_0$  the initial amount of the ingredient; and K the rate constant of volatilization. The activation energy (E) of the process is 14 kcal/mole. The equation  $K = K_0 [\exp(-E/RT)] [(w_t/(b + w_t))] (1 + aC_0)/h$  (II) was derived on the basis of the found dependences of K on temperature (T), flow velocity of the gas ( $w_t$ ),  $C_0$ , and h.  $K_0$  is a constant depending on the nature of the

Card 1/2

26880  
S/081/61/000/013/020/028  
Volatilization of ingredients from rubbers B117/B203

substance studied and of the polymer. a and b are experimentally found. The loss of ingredient can be calculated from (I) and (II) for various polymers and test conditions. The volatilization rate decreases in the order of polymers: polyethylene>fluorine rubber>polybutadiene rubber>CKC-30 (SKS-30)>CKH-26 (SKN-26)>nairit (this agrees with data on the change in solubility); volatilization of SKB is slowed down by introduction of filler, more by channel black than by chalk. In radiation vulcanizates of SKB, volatilization is slowed down by an increase in density of the lattice.  
[Abstracter's note: Complete translation.]

Card 2/2

ANGERT, L.G.; ZENCHENKO, A.I.; KUZ'MINSKIY A.S.

Volatilization of ingredients from polymers. Koll.zhur. 22 no.1:  
2-8 Ja-F '60. (MIRA 13:6)

1. Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti,  
Moskva.  
(Volatility) (Rubber) (Antioxidants)

SOV/80-32-2-32/56

AUTHORS: Angert, L.G., Gol'dfarb, Ya.L., Gorushkina, G.I., Zenchenko,  
A.I., Kuz'minskiy, A.S., Fedorov, B.P.

TITLE: Syntheses of Some Thiophene Derivatives and the Study of Their Behavior as Ingredients of Resins (Accelerators and Antioxidants) ((Sintezy nekotorykh proizvodnykh tiofena i izuchenie ikh povedeniya v kachestve ingrediентov resin (uskoriteley i antioksidantov))

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol XXXII, Nr 2,  
pp 408-418 (USSR)

ABSTRACT: A total of 15 compounds of the thiophene series were investigated as ingredients of resin mixtures. They all contained the azomethine group  $XC_4H_2SCH = NRY$ , where X is hydrogen or  $CH_3^-$ , R an aliphatic or aromatic radical, Y a substituting group. Secondary amines were prepared by heating phenyl dichloride with amines in a solution of benzene or toluene. The products of this reaction, their melting and boiling points, analyses and yields are given in Table 2. These compounds inhibit the oxidation of rubber. The inhibiting action is due to the nature of the ortho- and paragroups in the benzene ring. As a control sample rubber containing phenyl- $\beta$ -naphthylamine was used in the experiments. The phenyl group  $C_4H_3SCH_2^-$  has nearly the same inhibiting influence

Card 1/2

SOV/80-32-2-32/56

Syntheses of Some Thiophene Derivatives and the Study of Their Behavior as Ingredients of Resins (Accelerators and Antioxidants)

as the phenyl group. The most pronounced effect have the inhibitors 5-methyl-2-thenylidene-n-aminophenol, 2-thenyl- $\beta$ -naphthylamine, etc. The synthesized compounds were tested also as vulcanization accelerators on the rubbers SKB, SKS-30, SKN-26 and NK. Most effective were 2-mercapto-4-(2'-thienyl)-thiazole and di-2-thenylideneethylenediamine. The thenylidene group had a greater effect on vulcanization acceleration than the benzene ring.

There are 5 tables, 1 graph and 20 references, 10 of which are Soviet, 3 American, 3 English, 2 German, and 2 French.

SUBMITTED: May 13, 1957

Card 2/2

ZENCHENKO, A.V., kand. nauk, referent

Report on the activity of societies of traumatologists and orthopedists for May-June 1962. Orti. travm. i protez. 23 no.10:92-94 O '62. (MIRA 17:10)

ZHENCHENKO, A.V.

Anatomical and histological modifications in the foot following  
osteoplastic surgery according to Vladimirov' method. Khirurgia  
no.4:76 Ap '54. (MLRA 7:6)

1. Iz Ukrainskogo instituta ortopedii i travmatologii imeni  
M.I.Sitenko.

(FOOT, surgery,

\*Vladimiroff's operation, postop. anat. & histol.  
changes)

ZENCHENKO, A.V., kand.med. nauk

Differential diagnosis of myelodisplasia. Trudy Ukr. nauch.-issl. inst. ortop. i travm. no.15:89-91 '59 (MIRA 16:12)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta ortopedii i travmatologii imeni prof. M.I.Sitenko (dir.-chlen-korrespondent AMN SSSR, prof. N.P.Novachenko).

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964420016-8

ZENCHENKO, A.V., kand.med.nauk; NECHAYEV, N.N.

Abstracts of foreign literature. Ortop. travm. i protex.  
24 no.2: 81-82 F'63. (MIRA 16:10)  
(BONES — DISEASES)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964420016-8"

ZENCHENKO, A.V.  
NIKOLAEV, L.P., professor; ZENCHENKO, A.V.

Clinical and roentgenological characteristics of the os  
tibiale exterum. Ortop. travm. i protez. no.2:37-44 Mr-Ap '55.  
(MLRA 8:10)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta ortopedii  
i travmatologii im. M.I.Sitenko (dir.-zasluzhennyy deyatel'  
nauki prof. N.P.Novachenko)  
(SESAMOID BONE, pathol.  
clin. & x-ray picture)

ZENCHENKO, A.V., kandidat meditsinskikh nauk

Mechanogenesis, clinical peculiarities and treatment of pronation dislocations of the head of the radius in children. Ortop. travm. i protez. 17 no.6:107-108 N-D '56. (MLRA 10:2)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta ortopedii i travmatologii im. M.I.Sitenko (direktor - zasluzhennyy deyatel' nauki professor N.P.Novachenko)  
(ELBOW--DISLOCATION)

ZENCHENKO, D.K. [deceased], dots., kand.tekhn.nauk

Investigating the performance of chain saws in the interval between  
grindings. Sbor.nauch.trud.BITI no.10:365-374 '57.

(MIRA 11:12)

(Chain saws)

SOV/133-59-2-18/26

AUTHORS: Zenchenko, F.I. and  
Peker, Ya.A., Engineers

TITLE: The Production of Protective Atmosphere for Bright Annealing (Proizvodstvo zashchitnoy atmosfery dlya svetlogo otzhiga)

PERIODICAL: Stal', 1959, Nr 2, pp 151-157 (USSR)

ABSTRACT: The development of the production of a protective atmosphere for bright annealing of cold rolled sheets on the Magnitogorsk Works is described. The atmosphere is produced by the combustion of a mixture of coke oven and blast furnace gas of the following composition %:  
CO 17-19; CO<sub>2</sub> 7-10; O<sub>2</sub> - 0.2; CrHm - 0.1; H<sub>2</sub> 25-30  
CH<sub>4</sub> 8-12. The technological scheme of the production is shown in fig.4. The characteristic feature of the plant is the automatic control of the gas to air ratio, shown in fig.5, which is based on the differential pressure of the gas before and after combustion. The dependence of the CO content in the protective atmosphere on the differential pressure before and after combustion is shown in fig.6. It was established that in order to obtain high quality surface of cold rolled sheets by bright

Card 1/2

SOV/133-59-2-18/26

The Production of Protective Atmosphere for Bright Annealing

annealing the protective atmosphere should be dried to -30°C dew point and contain 3-5% of hydrogen, up to 1.5% of carbon dioxide and 3-4% of carbon monoxide. The necessary conditions for obtaining the protective atmosphere of constant composition are as follows: stability of the calorific value of the initial gas and an automatic maintenance of the gas to air ratio passing into the combustion chamber. There are 6 figures and 2 references, both of which are Soviet.

ASSOCIATION: Magnitogorskiy Metallurgicheskiy Kombinat (Magnitogorsk Metallurgical Combine)

Card 2/2

ZENCHENKO, E.I.inzh.; PEKER, Ya.A., inzh.

Producing protective atmospheres for bright annealing. Stal'  
12 no.2:151-155 F '59. (MIRA 12:2)

1. Magnitogorskiy metallurgicheskiy kombinat.  
(Annealing of metals) (Protective atmospheres)

ZENCHENKO, M.A.; PETSYNA, Z.N.; SEMENOVA, L.A., starshiy nauchnyy sotrudnik

Nonwoven filter fabrics made from chlorine. Tekst. prom. 24 no.9:  
43-45 S '64. (MIRA 17:11)

1. Nachal'nik ot dela netkanykh tekstil'nykh materialov Kalininskogo nauchno-issledovatel'skogo instituta tekstil'noy promyshlennosti (KNIITP) (for Zenchenko). 2. Zaveduyushchiy laboratoriye netkanykh tekstil'nykh materialov Kalininskogo nauchno-issledovatel'skogo instituta tekstil'noy promyshlennosti (for Petsyna). 3. Otdel netkanykh tekstil'nykh materialov Kalininskogo nauchno-issledovatel'skogo instituta tekstil'noy promyshlennosti (for Semenova).

S/133/60/000/008/016/017/XX  
A054/A029

AUTHOR: Zenchenko, F. I., Engineer

TITLE: Automatic Grading of Sheet Metal

PERIODICAL: Stal', 1960, No. 8, pp. 732-733

TEXT: At the Magnitogorskiy metallurgicheskiy kombinat (Magnitogorsk Metallurgical Combine) equipment for the automatic grading of sheets was installed in one of the units for cross-cutting steel sheets. The apparatus cuts sheets 0.2 - 0.6 mm thick and 500 - 1,000 mm wide at a rate of 1.5 - 5.0 m/sec, the length of the strips varies from 330 to 1,510 mm, the maximum weight of the coil given up on the machine for cutting amounts to 15 tons, with an external diameter of 1,800 mm. The apparatus for detecting defects in the sheets was incorporated into the process of extending and cutting the sheets and was installed on the control stand in front of the straightening-extending apparatus of the unit. The device for detecting perforations in the sheet ("defectoscope") registered holes as small as 0.01 mm. A lighting block is arranged above the passing strip, while a block containing a photoelectric multiplier is placed below the strip. When the checking device detects a perforation in the strip, this is immediately relayed and an impulse is given for the automatic deceleration of the machine; at the same

Card 1/2

Automatic Grading of Sheet Metal

S/133/60/000/008/016/017/xx  
A054/A029

time one of the 10 conveyer belts operating in the packing unit of the machine will be lowered in such a position so as to be able to remove the faulty sheet. Next a timing relay activates the conveyer belt and it returns to its original position, the speed of the unit again increases and normal operation is resumed. The photoelements are protected from external light by a special device. The electronic device for discarding punched sheets is arranged in a box and mounted near the unit. Rejection of the sheets which are incorrect in thickness takes place by means of a non-contacting isotopic micrometer (of UTU 495 = ITU 495 type) working with radioactive strontium isotopes. The device controls the sheet thickness within the 0.03 - 0.7 mm range, by gauging the absorption of  $\beta$ -radiation, passing through the sheet. The device consists of two  $\beta$ -radiation sources, a radiation recorder, an electronic amplifier and an indicator. When upon passing over the control stand the thickness of the sheet deviates from the standard set, the device gives an impulse which activates the conveyer belt I and it removes the rejected sheet. When the strip passing on the control stand is again up to standard, conveyer I receives an impulse to return in the original position. It was possible to decrease the number of workers required for the operation of this unit by including the automatic grading devices in the technological process of transverse sheet cutting. There are 3 figures.

ASSOCIATION: Magnitogorskiy metallurgicheskiy kombinat (Magnitogorsk Metallurgical Combine)  
Card 2/2

ZENCHENKO, F.P.

Diagnosis of primary pulmonary sarcoma during life. Sovet. med.  
no.10:25-26 Oct 1951. (CLML 21:1)

1. Of the Hospital Therapeutic Clinic (Director -- Honored  
Worker in Science Prof. N. A. Kurshakov). Moscow Medical  
Institute of the Ministry of Public Health RSFSR.

ZENCHENKO, G.I. [Zenchenko, H.I.]

Investigation of conditioned reflex activity in free and isolated dogs. Fiziol. zhur. [Ukr.] 8 no.2:168-175 Mr-Ap '62. (MIRA 15:5)

1. Cherkassy Pedagogic Institute.  
(CONDITIONED RESPONSE)

ZENCHENKO, I.

The dining room has become an essential part of our life.  
Obshchestv. pit. no.8:8-9 Ag '61. (MIRA 14:10)

1. Direktor sovkhoza "Leninskiy" Severo-Kazakhstanoy oblasti.  
(North Kazakhstan Province—Restaurants, lunchrooms, etc.)

MIKOYAN, A.; IGNATOV, N.; KOROVUSHKIN, A.; GARBUZOV, V.; KABKOV, Ya.;  
KUDRYAVTSEV, A.; BORYCHEV, I.; VOROB'YEV, V.; SVESHNIKOV, M.;  
USHIAKOV, V.; MIROSHNICHENKO, B.; ZENCHENKO, N.; BABUSHKIN, V.;  
NIKITKIN, N.; PODSHIVALENKO, P.; ZOTOV, M.; VOSKRESENSKIY, A.;  
KAZANTSEV, A.; KORDYUKOV, A.; NOSKO, P.; PLESHAKOV, S.; VERSOV, A.;  
ROMASHOV, A.

I.N. Kazakov; obituary. Den. i kred. 19 no.3:95 Mr '61.

(MIRA 14:3)

(Kazakov, Ivan Nikolaevich, 1907-1961)

ZENCHENKO, P.G., inzh.

Using hinged formwork to work sections of vertical mine shafts for  
junction with shaft bottoms. Shakht.stroi. 8 no.3:25-27 Mr '64.  
(MIRA 17:3)

1. Prokop'yevskoye shakhtostroitel'noye upravleniye No.1.

IVANOV, Dmitriy Ivanovich; ZENCHENKO, Petr Mikhaylovich, tekhnolog; CHUPRUNOV, V.I., nauchn. red.; KAZAROV, Yu.S., red.

[Finishing work in shipbuilding] Iz opyta sudovykh dostroechnykh rabot. Leningrad, Sudostroenie, 1964.  
(MIRA 18:1)  
74 p.

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964420016-8

SHKATOV, A.P., inzh.; ZENCHENKO, T.I.; Prinimala uchastiye YEVSTRATOVA, V.M.

Investigating the structure and properties of certain steels for  
dies used in forging. [Nauch. trudy] ENIKMASHA no.9:15-27 '64.  
(MIRA 17:11)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964420016-8"

Direction of enzyme action and the influence of vernalization on R. A. T. Oparin and V. A. Zaschenko (M.V. Lomonosov State Univ., Moscow). *Problemy Biokhimiya, Mikhaylovskii Biol. Akad. Nauk S.S.R., Seriya No. 1, 51-91 (1949).*—Young sprouts of winter wheat show greater synthetic activity of carbohydrate enzymes (sucrose formation) than do corresponding sprouts of summer wheat. Vernalization shifts the direction toward the hydrolytic action in winter wheat and brings it into closer correspondence to the behavior of summer varieties. While enzymic synthetic activity in wheat-grass grass hybrids is higher than it is in the corresponding winter or summer varieties of parent wheat, vernalization of the winter varieties leaves a higher level of synthetic activity than is found in corresponding wheat specimens. G. M. Kosolapoff

ZENCHENKO, V.A.; VESELOV, I.Ya.

Transformation of pentosans during barley malting. Trudy VNIIIPP  
no.4;108-116 '54. (MLRA 10:1)  
(Barley) (Pentosans)

USSR/Biology - Biochemistry

Card 1/1 Pub. 22 ~ 30/48

Authors : Zenchenko, V. A.

Title : Effect of geographic latitude on the peroxidase activity in barley seeds and plants.

Periodical : Dok. AN SSSR 98/3, 439-442, Sep 21, 1954

Abstract : The effect of geographical latitude on the breathing and activity of oxidizing ferment (oxidase) in seeds and plants of barley, grown in the extreme north as well as in extreme south, was investigated. The results obtained are given in table. Eighteen references: 17-USSR and 1-German (1922-1953).

Institution : Ministry of Beer Brewing Industry, All-Union Scientific Research Institute of Beer Brewing Industry

Presented by: Academician A. L. Kursanov, May 11, 1954

ZENCHENKO, V.A.

Correlation between the biochemical indices of malt and the  
weight ratio of germ to endosperm in a barley grain. Trudy  
VNIIPP no.7:25-35 '59. (MIRA 13:5)  
(Barley) (Malt) (Biochemistry)

ZENCHENKO, V.A.

Nonenzymatic oxidation in the seed embryos of wheat of northern origin. Fiziol. rast. 12 no.2:242-247 Mr.-Ap '65. (MIRA 18:6)

1. Institut fiziologii rasteniy imeni Timiryazeva AN SSSR, Moskva.

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964420016-8

ZENCHENKO, V.A.

Activity of polyphenoloxidase in the germs of seeds of northern  
origin. Trudy lab. evol. i ekol. fiz. no.4, 18:1-89 '62.

(MIRA 18:3)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964420016-8"

ZENCHENKO, V.A.

Cytochrome oxidase and peroxidase activity in the embryos of seeds  
of northern origin. Fiziol. rast. 11 no.2:270-273 Mr-Ap '64.  
(MIRA 17:4)

1. Timiriazev Institute of Plant Physiology, U.S.S.R. Academy of  
Sciences, Moscow.

ZENCHENKO, V.A.

Improved calculation method for microdetermination of sugars. Fiziol.  
rast. 8 no.2:251-254 '61. (MIRA 14:3)

I. K. A. Timiriazev Institute of Plant Physiology , U.S.S.R. Academy of  
Sciences, Moscow.

(Sugars—Analysis)

BEREZIN, G.A.; ZENCHENKO, V.P.

Pneumatic positioner. Mashinostroitel' no.8:26 Ag '61.

(MIRA 14:7)

(Pneumatic control)

S/117/61/000/002/013/017  
A004/A101

AUTHOR: Zenchenko, V. P.

TITLE: Three-way electro-pneumatic valve

PERIODICAL: Mashinostroitel', no. 2, 1961, 27

TEXT: The described three-way electro-pneumatic valve is intended for the transformation of electric signals into pneumatic ones in automatics with pneumatic tools which are electrically controlled. The valve can be utilized either for the direct control of single-stroke cylinders up to 50 mm in diameter or for the switching over of air distributors. Compressed air from the mains is supplied to one of the orifices in base 1, the choice depending on the convenience of mounting. The other orifice is closed with plug 2. The unit being controlled is connected to the lefthand orifice. The illustration shows the valve deenergized, plunger 3 is in the lower position and the central orifice in cover 4 is connected with the atmosphere. With the aid of rubber plug 5 the plunger closes the orifice in bushing 6 connected to the mains. In the operating state the plunger moves towards the cover, opens the orifice in the bushing and closes the orifice in the cover which leads into the air. The valve is hermetically sealed by rubber

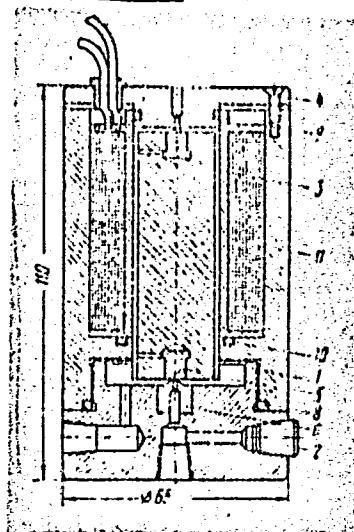
Card 1/2

Three-way electro-pneumatic valve

rings 8, 9, and 10 of round cross section. The magnetic circuit units (casing 11, pad, cover 4 and plunger 3) are made of Armco iron. It is maintained that the electro-pneumatic valve described above is superior to similar designs because of its great reliability and low current requirements. There is 1 figure.

S/117/61/000/002/013/017  
A004/A101

Figure:



Card 2/2

ZENCHENKO, V.P.

Structural synthesis of pneumatic systems of automatic  
machines based on distributors with a one-sided drive.  
Teor. mash. i mekh. no.92/93:148-152 '62. (MIRA 16:11)

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964420016-8

ZENCHENKO, V.P.; FROLOV, M.L.

Pneumatic pulse counter. Mashinostroitel' no.9:26 S '62.  
(MIRA 15:9)  
(Calculating machines)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964420016-8"

ZENCHENKO, V. P.

Dissertation defended at the Institute of Automation and Telemechanics  
for the academic degree of Candidate of Technical Sciences:

"Structural Synthesis of Pneumatic Systems of Automatic Machines."

Vestnik Akad Nauk, No. 4, 1963, pp. 119-145

ZENCHENKO, V.P.

Logic and pneumatics. Mashinostroitel' no.6:12-13 Je '62.  
(MIRA 16:5)  
(Pneumatic control)

ZENCHENKO, Vladimir Petrovich; KREYNIN, German Vladimirovich;  
PROKOF'YEVA, N.B., red.izd-va; SIMKINA, G.S., tekhn.red.

[Air controls automatic machines; pneumatic control systems  
for machinery] Vozdukh upravliaet avtomatami; pnevmaticheskie  
sistemy mashin-avtomatov. Moskva, Izd-vo Akad. nauk SSSR,  
1963. 108 p. (MIRA 16:4)

(Pneumatic control)

ZAGULOV, A.M.; ZENCHENKO, V.P.

Easy-shifting pneumatic valves. Mashinostroitel' no.12:23 D  
'61. (MIRA 14:12)

(Valves)

ACC NR: AM6028927

Monograph

UR/

Gerts, Ye. V.; Zenchenko, V. P.; Kreyzin, G. V.

Synthesis of pneumatic drives (Sintez pnevmaticheskikh privodov)  
Moscow, Izd-vo "Mashinostroyeniye," 1966, 210 p. illus., biblio.  
6500 copies printed.

TOPIC TAGS: pneumatic device, pneumatic logic device, automatic control design,  
pneumatic control system

PURPOSE AND COVERAGE: This book is intended primarily for design  
engineers and research scientists; however, it can be also used by  
students specializing in machinebuilding. Structural synthesis of  
discrete control systems in pneumatically operated automatic  
machines by means of mathematical logic devices is presented. Pneu-  
matic means for carrying out logic operations are shown in examples,  
and methods of designing control systems with potential and pulse  
signals are considered.

## TABLE OF CONTENTS [abridged]:

Introduction -- 3

Ch. 1. Pneumatic drive and its components -- 5

Ch. 2. Realization of logic operations by pneumatic devices -- 41

Ch. 3. Synthesis of single-cycle control systems -- 65

Card 1/2

UDC: 621.83:621.5.01

ACC NR: AM6028927

Ch. 4. Simplifying control system design -- 86  
Ch. 5. Synthesis of multicycle control systems with potential  
signals -- 102  
Ch. 6. Synthesis of multicycle control systems with pulse signals -- 160  
Ch. 7. Synthesis of integrated control systems -- 178  
Bibliography -- 205

SUB CODE: 13/ SUBM DATE: 31Mar66/ ORIG REF: 077/ OTH REF: 084

Card 2 / 2

ABRAMOV, V.F.; ZENCHENKO, V.P.

Air distributors with pneumatic and electric control. Mashinostroitel'  
no. 9:40 S '61.  
(MIRA 14:10)  
(Pneumatic machinery)

S/117/62/000/0C6/001/001  
A004/A101

AUTHOR: Zenchenko V. P.

TITLE: Logic and ... pneumatics

PERIODICAL: Mashinostroitel', no. 6, 1962, 12-13

TEXT: The author points out that logical systems can be designed not only with the aid of electronics, but may be also pneumatic or hydraulic systems. Although the processes in pneumatic assemblies are performed many times slower than in electronic installations, there are already pneumatic devices which are able to carry out up to two thousand operations per second. Moreover, quite a number of problems do not require a rapid solution, whereas pneumatic systems are absolutely explosionproof, simple, reliable and resistant to dust, jolts, etc. Therefore, the author concludes, that, if logical operations do not require a high performance rate, pneumatic systems are much more expedient than electronic ones. The author explains the functioning of pneumatic installations in the reproduction of the elementary logical operations "and", "or", "not" and "memory", comparing these operations with combinations of human reasoning. He designates a complex sentence with P. the truth of which is proved if the two simple

Card 1/2

S/117/62/000/006/001/001  
A004/A101

Logic and ... pneumatics

sentences a and b, which form the complex sentence P, are true. Thus the "and" operation is expressed by the equation  $P = ab$ , the "or" operation by  $P = a + b$  and the "not" operation by  $P = a$  ( $P$  equal to not  $a$ ). A number of schematics show the carrying out of these logical operations by pneumatic systems. The author points out that logical methods are not only used in the designing of intricate "thinking" machines, but also in the plotting of machine tool diagrams. He gives a brief description of the control system of a pneumatic press and emphasizes the vast possibilities of using pneumatic logical systems in the technology of mechanical engineering. There are 5 figures.

Card 2/2

S/121/62/000/004/001/008  
D040/D113

AUTHOR: Zenchenko, V.P.

TITLE: A structural method for designing pneumatic control systems with path control

PERIODICAL: Stanki instrument, no. 4, 1962, 5-8

TEXT: A method for designing automatic pneumatic control systems for machine tools, based on the principles of structural synthesis of relay control systems developed at the AS USSR (V.N. Roginskiy, Elementy strukturnogo sinteza releynykh skhem upravleniya/Elements of the structural synthesis of relay control systems/, Izd. AN SSSR, 1959), is suggested. The method consists in (a) determining the required number of air cylinders and path switches (3-way valves) functioning as position pick-ups, (b) plotting cyclograms of (1) cylinder operation and (2) position pick-up states, (c) analyzing the latter, selecting the corresponding number of memory elements, and finding moments when these elements change their state, (d) introducing these elements into the cyclogram, (e) compiling and checking a coincidence table, (f) finding a general solution for each

Card 1/2

A structural method for designing....

S/121/62/000/004/001/008  
D040/D113

control cavity, then simplifying it by any conventional method, (g) setting the circuit formula, then realizing it using logical functions. The method is used for repetition, denial and other operations. The presence of a signal in any cavity corresponds to 1, while the absence of such a signal corresponds to 0. Conclusions: (1) The proposed method permits plotting any pneumatic system with path control according to a given cyclogram; (2) a system designed in this way will function under any dynamic conditions; (3) such a system will require no setting at the moment of start. There are 7 figures and 1 table.

Card 2/2

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964420016-8

ZENCHENKO, V.P.

Automatic addressing of freight. Mashinostroitel' no.4:7-8  
(MIRA 15:5)  
Ap '62.  
(Making devices)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001964420016-8"

ZENCHENKO, V.P.

Some problems in the classification and design of pneumatic  
control systems for automatic machinery. Trudy Inst.mash.Sem.  
po teor.mash. 22 no.87:80-95 '61. (MIRA 14:8)  
Pneumatic control)

*BR*

ACCESSION NR: AT4042437

S/0000/64/000/000/0059/0066

AUTHOR: Zenchenko, V. P.; Lazarev, V. G.; Piyl', Ye. I.

TITLE: Synthesis of pneumatic systems with track control using transition operations

SOURCE: Vsesoyuznoye soveshchaniye po pnevmo-gidravlicheskoy avtomatike. 5th, Leningrad, 1962. Pnevmo- i gidroavtomatika (Pneumatic and hydraulic control); materialy soveshchaniya, Moscow, Izd-vo Nauka, 1964, 59-66

TOPIC TAGS: automation, automatic control system, pneumatic control system, track control, transition operation, cyclogram, control system design

ABSTRACT: In an earlier paper by the first author (V. P. Zenchenko. Strukturnyy metod postroyeniya pnevmaticheskikh sistem s putevym kontrolem. Stanki i Instrument, 1962, No. 4), a method was proposed for the synthesis of pneumatic systems with track control based on devices which realized the operations AND, OR, NOT, and MEMORY, and which allowed one to obtain dynamically stable systems. In the present paper, the authors start with a discussion of the transition operations. The cyclograms of a machine for crimping covers and of a loading device are illustrated by way of example. They then show how to eliminate the coincidence of the stages and how to simplify the pulse-potential forms. Using the method

Card 1/2

ACCESSION NR: AT4042437

proposed in this paper, systems can be designed which contain considerably fewer components as compared with those designed by the method of the earlier paper. Also, the systems which are designed by the present method are efficient for the determination of dynamic conditions whose variation can require occasional debugging. Orig. art. has: 5 figures and numerous formulas.

ASSOCIATION: none

SUBMITTED: 29Jan64

SUB CODE: IE

NO REF Sov: 005

H  
ENCL: 00

OTHER: 000

Card 1 2/2

L 10284-67 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l) FDN/GD  
ACC NR: AT6031185 (A) SOURCE CODE: UR/ 0000/66/000/000/0234/0241

AUTHOR: Berezin, G. A.; Zenchenko, V. P.

34

ORG: None

TITLE: Synthesis of pneumatic systems of sequential automatic machines in the presence of input signals

SOURCE: Teoriya mashin-avtomatov i pnevmo-gidroprivodov (Theory of automatic machinery and pneumatic and hydraulic drives); sbornik statey. Moscow, Izd-vo Mashinostroyeniye, 1966, 234-241

TOPIC TAGS: automatic pneumatic control, sequence, cyclic coding

ABSTRACT: The authors consider operation of a self-contained automatic machine assuming that operation may be described by cyclic continuous repetition of a given word in some alphabet  $q$ . If  $q_i$  designates the internal state of the machine in the  $i$ -th cycle, the operation of the system is defined by the relationship

$$q_i = F(q_{i-1}),$$

so that given operating conditions may be realized only if each state  $q_{i-1}$  uniquely

Card 1/2

L 10284-67

ACC NR: AT6031185

determines the state  $q_i$ . A sequence which permits transition from one state to two or more different states is called *contradictory* while the conditions determining this sequence are called *unrealizable*. The procedure required for converting unrealizable conditions into realizable conditions is discussed and synthesis of a control system is analyzed for various types of external signals. Orig. art. has: 4 figures, 3 formulas.

SUB CODE: 13/ SUBM DATE: 12Jan66/ ORIG REF: 002

Card 2/2

SAVIN,D.K., inzhener; ZENCHENKO,Yu.I., inzhener

Repair requirements in designing the KS-10 self-propelled mower.  
Sel'khozmashina no.5:28-31 Ny '55. (MLRA 8:6)  
(Mowing machines)

ZENCHENKO, Yu.I., student

Abdominal pregnancy. Kaz. Med. Zhur. no.6;61-62 '62.

(MIRA 17:5)

1. Kafedra akushерства i ginekologii (zav. - prof. V.A. Pokrovskiy)  
Voronezhskogo meditsinskogo instituta.

BENGYNEKO, Y.I.N.

Optimal quantity of calcium chloride in plugging muds. Bureniye  
no. 5:26-28 '64. (MIHA 18:5)

1. Ukrainskiy filial Vsesoyuznogo nauchno-issledovatel'skogo  
instituta prirodnogo gaza.